

HINGE ASSEMBLY FOR A MULTI-CONFIGURATION PORTABLE ELECTRONIC DEVICE

ABSTRACT OF THE DISCLOSURE

5 A hinge assembly (2100) includes a hinge body (2102) made of two hinge body halves (900). Each hinge body half is identical so that only one part need be manufactured, and two of them used to form the hinge body. Each hinge body half has a first leg (902) that is longer than a second leg (904). The first leg has a retaining lip (912) at the end which forms a retaining feature. Each leg of the hinge body

10 defines an axis of rotation for the body elements (104, 106). A portion (1508) of a flexible circuit board (1506) is captured between the hinge body halves so as to electrically interconnect circuitry placed in each body element. A detent mechanism is provided to hold the body element in preselected positions with respect to each other, and includes a spring (2106), a cam (2108) and a cap (2110) having cam

15 follower features (2118). The cam is held in place with respect to the body element housing, while the cap is fixed in position with respect to the hinge body. To stabilize the rotation of the body elements, a hook (2404) retains a collar edge (2402) upon rotation of the respective body element.